Claims:

Please amend the claims as follows:

1. (Previously presented) A method of interfacing with network management information on a network device, comprising:

receiving a non-object oriented management information database (MIB) at a compiler of a network device, the non-object oriented MIB including information related to one or more aspects of the network device;

extracting a subset of information from the non-object oriented MIB describing at least one aspect of the network device; and

producing an object-oriented interface, for use by an object-oriented application to access the subset of information in the non-object oriented MIB, by generating a set of object-oriented classes and object-oriented methods corresponding to the subset of information in the non-object oriented MIB.

2. (Previously presented) The method of claim 1, wherein information in the non-object oriented MIB corresponds to a set of network parameters organized in a hierarchy and used to describe aspects of the network device.

3. (Previously presented) The method of claim 1, wherein:

extracting information from the non-object oriented MIB further includes lexically recognizing a set of tokens corresponding to a set of network parameters that describes aspects of the network device and parsing the tokens according to a hierarchical relationship between the set of parameters; and

generating a set of object-oriented classes and object-oriented methods includes generating a set of object-oriented classes and object-

oriented methods corresponding to the lexically recognized and parsed tokens.

4. (Previously presented) The method of claim 1, wherein a relationship among the object-oriented classes is a hierarchy that corresponds to the non-object oriented MIB.

5. (Original) The method of claim 1, wherein the methods generated include methods capable of accessing and manipulating objects instantiated from at least one of the object-oriented classes.

6. (Previously presented) The method of claim 5, wherein the methods include one or more of the operations used to operate on the non-object oriented MIB.

7. (Previously presented) The method of claim 6, wherein the operations used to operate on the non-object oriented MIB are selected from a group of operations including get, set, and test of SNMP (simple network management protocol) variables.

8. (Previously presented) A method of interfacing with network management information on a network device, comprising:

providing a non-object oriented management information database (MIB) including information related to one or more aspects of a network device; and

using a set of object-oriented classes and object-oriented methods to access the non-object oriented MIB and the information related to one or more aspects of the network device.

9. (Previously presented) The method of claim 8, wherein information in the non-object oriented MIB corresponds to a set of network parameters

organized in a hierarchy and capable of describing aspects of the network device.

10. (Previously presented) The method of claim 8, wherein a relationship among the object-oriented classes is a hierarchy that corresponds to the non-object oriented MIB.

11. (Original) The method of claim 8, wherein the object-oriented methods are capable of accessing and manipulating objects instantiated from at least one of the object-oriented classes.

12. (Previously presented) The method of claim 11, wherein the object-oriented methods correspond to one or more of the operations used to operate on the non-object oriented MIB.

13. (Previously presented) The method of claim 12, wherein the one or more operations used to operate on the non-object oriented MIB are selected from a group of operations including get, set, and test of SNMP (simple network management protocol) variables.

14. (Previously presented) An apparatus to interface with network management information on a network device, comprising:

a receiver module configured to receive a non-object oriented management information database (MIB) including information related to one or more aspects of the network device;

an extraction module configured to extract a subset of information from the non-object oriented MIB describing at least one aspect of the network device; and

a generation module configured to produce an object-oriented interface, for use by an object-oriented application to access the subset of information in the non-object oriented MIB, by generating a set of

object-oriented classes and object-oriented methods corresponding to the subset of information in the non-object oriented MIB.

15. (Previously presented) The apparatus of claim 14, wherein information in the non-object oriented MIB corresponds to a set of network parameters organized in a hierarchy and used to describe the network device.

16. (Previously presented) The apparatus of claim 14, wherein:

the extraction module extracts information from the non-object oriented MIB by lexically recognizing a set of tokens corresponding to a set of network parameters describing the device and parsing the tokens according to a hierarchical relationship between the set of parameters; and

the generation module generates a set of object-oriented classes and object-oriented methods according to the lexically recognized and parsed tokens.

17. (Previously presented) The apparatus of claim 14, wherein the relationship among the object-oriented classes is a hierarchy that corresponds to the non-object oriented MIB.

18. (Original) The apparatus of claim 14, wherein the object-oriented methods generated include object-oriented methods capable of accessing and manipulating objects instantiated from at least one of the object-oriented classes.

19. (Previously presented) The apparatus of claim 18, wherein the object-oriented methods include one or more of the operations used to operate on the non-object oriented MIB.

20. (Previously presented) The apparatus of claim 19, wherein the operations used to operate on the non-object oriented MIB are selected from a group of operations including get, set, and test of SNMP (simple network management protocol) variables.

21. (Previously presented) An apparatus for interfacing with network management information on a network device, comprising:

a first storage area configured to store a non-object oriented management information base (MIB) including information related to one or more aspects of a network device; and

a second storage area configured to store a set of object-oriented classes and object-oriented methods that is used to access the non-object oriented MIB and the information related to one or more aspects of the network device.

22. (Canceled)

23. (Canceled)

24. (Previously presented) An apparatus for interfacing with network management information on a network device, comprising:

means for receiving a non-object oriented management information database (MIB) including information related to one or more aspects or a network device;

means for extracting a subset of information from the non-object oriented MIB describing at least on aspect of the network device; and

means for producing an object-oriented interface, for use by an object-oriented application to access the subset of information in the non-object oriented MIB, by generating a set of object-oriented classes

and object-oriented methods corresponding to the subset of information in the non-object oriented MIB.

25. (Cancelled)

26. (Previously presented) A method of interfacing with network management information on a network device, comprising:

adding a new network device to a network of one or more network devices, the new network device and each of the one or more network devices having one or more network management parameters stored in a non-object oriented management information database (MIB);

distributing an object-oriented network management application to the new network device from the one or more network devices, the object-oriented network management application operable to generate an object-oriented request for one or more network parameters stored in a non-object oriented MIB;

determining that the network management application is requesting one or more network parameters stored locally in the non-object oriented MIB of the new network device;

creating a native variable interface, the native variable interface being an object-oriented application interface that provides direct access to the one or more network parameters stored locally using object-oriented classes and methods; and

accessing the one or more network parameters stored locally through the native variable interface.

27. (Previously presented) The method of claim 26, wherein the step of creating a native variable interface includes initially accessing indirectly one or more network parameters stored locally that describe features of the new network device using a loopback address of the new network

device, including sending an simple network management protocol (SNMP) protocol data unit (PDU) to the loopback address of the new network device, the SNMP PDU to retrieve the one or more network parameters stored locally that describe features of the new network device, and using the features of the new network device to customize the native variable interface.

28. (Previously presented) The method of claim 27, wherein the step of sending an SNMP PDU to the new type of network device includes using an SNMP stack associated with the new network device.

29. (Previously presented) The method of claim 27, wherein the step of accessing indirectly one or more network parameters stored locally that describe features of the new network device includes generating an object-oriented method call for the one or more network parameters stored locally that describe features of the new network device, and converting the object-oriented method call into the SNMP PDU.

30. (Previously presented) The method of claim 29, wherein the SNMP PDU includes one or more SNMP operations selected from the group of get, set and test.